

### ABSTRACT OF THE DISCLOSURE

- The horizontal and vertical offset for the  $M \times N$  DCT block boundaries are determined for a decompressed image originally produced by a DCT-based compression system, regardless of the amount of compression and/or cropping that had been applied to the image. The method includes the steps of:
- 5 a) computing one or more selected DCT coefficients from nonoverlapping, contiguous  $M \times N$  blocks of the decompressed image, beginning at a selected offset; b) computing a coefficient histogram from a set of values for each selected DCT coefficient obtained from the blocks of the decompressed image; c)
  - 10 computing a dispersion metric from each coefficient histogram; d) repeating steps (a) through (c) for a plurality of offsets within an  $M \times N$  block; e) comparing the dispersion metrics corresponding to the plurality of offsets to determine the minimum dispersion coefficient histogram; and f) selecting the offset that corresponds to the minimum dispersion coefficient histogram as the offset for the
  - 15 DCT block boundaries.

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